

## PRECISION COACHSCREWING MACHINE

### MODEL TPAS

The **Two speeds Precision Coachscrewing Machine model TPAS** features **high precision** thanks to its **hydraulic servo** and is specifically designed to **tighten and untighten coachscrews, bolts and particularly elastic fastenings** on railways tracks.

TPAS **suits to all rails laying methods, track renewals and difficult maintenance operations** which require high precision.

Machine is EC-compliant.



#### 1. DESCRIPTION AND OPERATION

This highly accurate heavy-duty coachscrewing machine with hydraulic assistance features following advantages:

- Double conical clutch **with hydraulic servo** enabling **accurate control of the tightening torque**;
- Hydraulic torque limiting device **with graduated dial** to pre-select and read the tightening torque
- **Two socket rotations speeds** to ensure coachscrewing and bolting operations **according to necessary torque to be produced. Speed switch is remote controlled** (low speed for tight fastenings, high speed for better output) from the raised operating arms of the machine

## 1. DESCRIPTION AND OPERATION (Cont'd)

TPAS mainly includes the following elements:

- One four stroke **petrol engine**, air-cooled, recoil starter and **super-silencer** with protective grid, and **remote engine stop button**;
- One **3-wheel trolley** integral with the machine fitted with removable balancing bar for running on track;
- One double cone **inverter-clutch** with hydraulic control and assistance;
- One **torque limiting device** with graduated dial;
- One ball fixing device for sockets;
- Permanent lubrication of all mobile parts in oil baths;
- One tool kit;
- One user manual.

All mechanical parts are made of special steel. They are treated, machined and set on ball bearings, which ensures their interchangeability and the sturdiness of the machine. Oil baths in tight casings ensure permanent lubrication.

## 2. TECHNICAL DATA

– Track gauge:	1 435	mm ( <i>others on request</i> )
– Petrol engine <b>Honda GX200</b> , 4-stroke, air-cooled, recoil starter, supersilencer with protective grid, remote engine stop button:	6,5	ch (4,9 kW) à 3 600 tr/min
– Driving square:	23	mm ( <i>25,4 mm only for version with 3-wheel trolley</i> )
– Socket rotation speed ( <i>low speed / high speed</i> ):	60/160	rpm
– Maximum torque when screwing ( <i>low speed / high speed</i> ):	63/34	daN.m
– Maximum intermittent torque when unscrewing ( <i>low speed / high speed</i> ):	103/51	daN.m
– Dimensions :		
Length :	1920	mm
Width :	530	mm
Height :	925	mm
– Mass of the machine ( <i>in working order and equipped for 3-wheels trolley</i> ):	110	kg
– Removable balancing bar:	4,4	kg
– Mass of the machine ( <i>in working order and equipped for 4-wheels traversing trolley</i> ):	101	kg
– 4-wheels traversing trolley:	35	kg

### 3. ACCESSORIES AND OPTIONS (at extra price)

- **LED socket lighting device**  
(as origin supply)
- **Protective cover**  
(Ref. MYS)
- **Torque control equipment**  
(Réf. 12000 AW)
- **Removable fishbolting device**  
It can be fixed in few seconds on the machine for fastening and unfastening of fishbolts.  
(Ref. 3000 GA for 3-wheels trolley)  
(Ref. 3000 FN for 3-wheels traversing trolley)
- **4-wheels traversing trolley (insulated rollers)**  
(as an accessory or as origin supply in replacement of the 3-wheel trolley)  
It enables the operator to effortlessly swap the machine from one rail to the other.
- **Double track gauge for 4-wheels traversing trolley**  
(track gauge to be specified when ordering)
- **4-wheels traversing trolley with "auto-brake" braking system**  
(as an accessory or as origin supply in replacement of the 3-wheel trolley)



### 4. CONSUMABLES (at extra price)

- **Sockets fully machined, made of nickel chrome steel alloy, case hardened and tempered with pin fixing device, available for all types of coachscrews and clipbolts**  
(Hereunder non exhaustive list, other types on request, please consult us)
  - For square coachscrews or square nuts:
    - 19 mm: N00084;
    - 20 mm: N00085;
    - 21 mm: N00086;
    - 22 mm: N03795;
    - 23 mm: N00087;
    - 24 mm: N03871;
    - 27 mm: N00088.



#### 4. CONSUMABLES (at extra price – Cont'd)

- **Sockets (cont'd)**

- For bolts with hexagonal nut:
  - 30 mm: N00092;
  - 32 mm: N03721;
  - 33 mm: N00093;
  - 34 mm: N00094;
  - 36 mm: N00096;
  - 37 mm: N00097;
  - 38 mm: N00098;
  - 39 mm: N00099;
  - 40 mm: N00100;
  - 41 mm: N00101;
  - 42 mm: N00102;
  - 44 mm: N00103.
- Octagonal for square coachscrews or square nut (7/8", 1" 1/8, 1" 11/16):
  - 7/8" (23 mm): N04277;
  - 1"1/8 (28,57 mm): N04776;
  - 1"11/16 (42,86 mm): N04741.
- For rectangular coachscrews (S49, S50, for Vossloh fastening SKL14):
  - 21 x 28 mm, S49: N00089;
  - 22 x 30 mm, S50: N01970;
  - 24 x 28 mm: N04698.
- For square coachscrews SL:
  - 23 mm: N03921;
  - 27 mm: N04717.
- For square coachscrews DC
  - 18 mm: N03920;
  - 20 mm: N04593.
- Hexagonal SL for nut:
  - 35 mm: N04204;
  - 36 mm: N00106;
  - 38 mm: N03836.
- Special socket "trundle" – square 23 mm and 6 sides 38 mm;
- Special socket for extraction of broken coachscrews.



*We reserve the right to modify any equipment specification of the present offer to take into account the latest technical improvements and working conditions at the date of manufacturing.  
Pictures and drawings may include some options and are not contractual.*